

REMARKS

Claims 1-12 and 14-20 are pending in this application.

Claims 1-12 and 14-20 have been rejected.

Claims 1, 9-12, and 14 have been amended, as set forth herein.

I. **REJECTION UNDER 35 U.S.C. § 101**

Claims 14, 15, 19, and 20 were rejected under 35 U.S.C. § 101 as lacking patentable utility. In particular, the Office Action asserts that Claims 14, 15, 19, and 20 recite a data structure “having several fields without any functional relationship to any hardware and/or software functionality.” (*Office Action, Page 4, first paragraph*). This rejection is respectfully traversed.

The Applicant has amended Claim 14 to recite a data structure that is “embodied on a computer readable medium” and that a “processor is capable of using the data structure” to perform particular functions. Claim 14 further recites various fields that are interrelated to one another. For example, Claim 14 recites a “field for a textual unit,” a field for a speech sample “associated with said textual unit,” a field for a frequency of “a first portion of the speech sample” that exceeds an amplitude threshold, and a field for a frequency of “a last portion of the speech sample” that exceeds the amplitude threshold.

Claim 14 (as amended) recites a data structure that is “embodied on a computer readable medium” and therefore does not recite “[d]ata structures not claimed as embodied in computer-readable media.” (*M.P.E.P. § 2106(IV)(B)(1)(a)*). As a result, Claim 14 should not be treated as

“descriptive matter, per se.”

In addition, Claim 14 recites various elements that are interrelated to one another and that the elements are used to perform particular functions. Based on this, Claim 14 recites “functional descriptive material” that includes “data structures ... which impart functionality when employed as a computer component.” (*M.P.E.P.* § 2106(IV)(B)(1)). Claim 14 does not merely recite “nonfunctional descriptive material” that includes “but is not limited to music, literary works and a compilation or mere arrangement of data.” (*M.P.E.P.* § 2106(IV)(B)(1)).

For these reasons, Claim 14 (and its dependent claims) recites patentable subject matter having utility. Accordingly, the Applicant respectfully requests withdrawal of the § 101 rejection and full allowance of Claims 14, 15, 19, and 20.

II. REJECTION UNDER 35 U.S.C. § 102

Claim 6 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,774,854 to Sharman (“*Sharman*”). The rejection is respectfully traversed.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

Claim 6 recites the use of a “vocabulary of textual units.” After parsing a text file into

textual units, Claim 6 recites adding a “stored textual unit” to a list if a parsed textual unit “corresponds to a stored textual unit in a vocabulary of textual units.” Each parsed textual unit represents “a word, a prefix or a suffix.”

The Office Action asserts that *Sharman* anticipates these elements of Claim 6 at column 5, lines 3-40. (*Office Action, Page 4, Last paragraph*). However, Applicant respectfully submits that this portion of *Sharman* fails to anticipate these elements of Claim 6.

First, *Sharman* recites that input text is split into words based on spacing and punctuation marks in the input text. (*Col. 5, Lines 3-4*). *Sharman* is clear – the input text is divided into words using spacing and punctuation marks, not using any sort of “vocabulary” of textual units as recited in Claim 6.

Second, *Sharman* recites that rules are used to convert numerals, acronyms, and abbreviations into words. (*Col. 5, Lines 9-12*). *Sharman* is also clear – numbers, acronyms, and abbreviations are converted into words without using any sort of “vocabulary” of words, prefixes, and/or suffixes as recited in Claim 6.

Third, *Sharman* recites that the words are then broken into syllables using a “dictionary look-up.” (*Col. 5, Lines 20-26*). This portion of *Sharman* fails to disclose adding a “textual unit” to a list if the textual unit appears in a vocabulary, where the textual unit represents “one of a word, a prefix or a suffix.” Instead, *Sharman* clearly shows that the dictionary is only used to break words into syllables, not to add the words themselves to a list.

Fourth, *Sharman* recites that when using the dictionary to break words into syllables, prefixes and suffixes may be removed from the words. (*Col. 5, Lines 26-29*). However, this

portion of *Sharman* fails to disclose determining whether a prefix or suffix is actually contained in the dictionary of *Sharman*. Moreover, this portion of *Sharman* lacks any mention of placing the prefix or suffix in a list when the prefix or suffix is contained in the dictionary.

For these reasons, *Sharman* fails to anticipate the Applicant's invention as recited in Claim 6. Accordingly, the Applicant respectfully requests withdrawal of the § 102(b) rejection of Claim 6.

III. REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-5, 9-12 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of U.S. Patent No. 5,878,393 by Hata et al. ("*Hata*"). Claims 7 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of "Computer Dictionary," Microsoft Press ("*Dictionary*"). Claims 8 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of O'Donnell, "Programming for the Real World – A Guide to Internationalization" ("*O'Donnell*"). Claims 14, 15, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* and *Hata* in view of U.S. Patent No. 4,979,216 to Malsheen et al. ("*Malsheen*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP

§ 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Regarding Claims 7, 8, and 16, for the same reasons set forth above in response to the 102 rejection of independent Claim 6, Applicant respectfully submits that independent Claim 6 is

patentable over *Sharman*. As a result, Claims 7, 8, and 16 are patentable due to their dependence from an allowable base claim.

Regarding Claims 1 and 9-12, *Sharman* recites generating sounds by converting text into words, words into syllables, and syllables into phonemes, and then using the phonemes to generate audio sounds. (*Col. 5, Line 3 - Col. 6, Line 60*). *Sharman* does not recite receiving a list containing “root words without any prefixes and suffixes, prefixes separate from the root words, and suffixes separate from the root words” and locating a speech sample associated with each root word, prefix, and suffix in the list as recited in Claims 1 and 9-12.

Hata generates sounds using a dictionary that has entries for individual words or for phonemes. (*Col. 3, Lines 42-64*). *Hata* does not disclose receiving a list containing “root words without any prefixes and suffixes, prefixes separate from the root words, and suffixes separate from the root words” as recited in Claims 1 and 9-12. *Hata* also lacks any mention of locating a speech sample associated with each of the “root words without any prefixes and suffixes,” “prefixes separate from the root words,” and “suffixes separate from the root words” as recited in Claims 1 and 9-12. Instead, as shown in Figure 3, the words “dollars” and “cents” (both of which are combinations of a root word and a suffix) in *Hata* are each associated with a sound.

Regarding Claim 14, *Sharman* and *Hata* both fail to disclose, teach, or suggest a data structure that includes a field for a “frequency of a first portion of the speech sample that exceeds an amplitude threshold” and a field for a “frequency of a last portion of the speech sample that exceeds the amplitude threshold” as recited in Claim 14. The Office Action cites column 6, line 64 through column 7, line 32 and Figure 3 of *Malsheen* as disclosing these elements of Claim 14.

However, these portions of *Malsheen* only show and describe “allophone formants,” which represent different times and frequencies of an allophone. Therefore, *Malsheen* does not disclose a field for a “frequency” of a first or last portion of a speech sample that “exceeds” an “amplitude threshold” as recited in Claim 14. In fact, this portion of *Malsheen* contains fails to mention an “amplitude threshold” as recited in Claim 14.

For these reasons, the Office Action fails to show that the proposed *Sharman-Hata* combination discloses, teaches, or suggests all elements of Claims 1 and 9-12 (and their dependent claims). The Office Action also fails to show that the proposed *Sharman-Hata-Malsheen* combination discloses, teaches, or suggests all elements of Claim 14 (and its dependent claims). Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejections and full allowance of Claims 1-5, 7-12, and 14-20.

IV. CONCLUSION

As a result of the foregoing, the Applicant asserts that the claims in this application are in condition for allowance and respectfully requests an early allowance of such claims.


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *rmccutcheon@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

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Robert D. McCutcheon
Registration No. 38,717

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3632 (direct dial)
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: *rmccutcheon@davismunck.com*